WHAT IS CLAIMED IS:

1. An optical system for identifying one or more objects, comprising:

    a light source array;

    an array of photo detectors;

    means for grouping said light source array and said array of photo detectors into at least two zones;

    means for rapidly strobing said light source array and scanning said photo detectors within each of said zones to capture a plurality of data values as one or more target objects pass through said zones;

    means for producing a capture image of said target objects utilizing said data values; and

    means for utilizing said capture image to identify said objects.

2. A system as recited in claim 1 further comprising means for accumulating counts of identified objects.

3. A system as recited in claim 1 further comprising means to determine opacity of said one or more target objects.

4. A system as recited in claim 1, wherein identifying includes comparing said objects with known objects, utilizing size and pixel luminance.

5. A system as recited in claim 1, wherein said capture image is displayed to an operator for identification.

6. A system as recited in claim 1, wherein said plurality of data values comprise:

    an analog signal value form said array of photo detectors;

    a gray scale converted from said analog signal value; and

    one or more data bits corresponding to said gray scale.

7. A system for counting objects, comprising:

a wide linear array of pixels, wherein said array of pixels contains one or more fixed width sections,each of said section having a predetermined number of individual pixels equally spaced;

a pixel processor coupled to each pair of pixels, wherein said pixel processors are grouped into a section, said section providing a state that correspond to values of individual pixels;

said section having a communications processor, said communications processor receiving information from each of said pixel processors within said section, wherein said pixel processors within a section are synchronized;

a network processor providing the interface between said communication processor and an application program that receives scan data and pixel counts.

8. A method in a computing system for counting a falling object passing between a light source and a plurality of photo detectors, comprising:

grouping said plurality of photo detectors into one or more counting zones;
repeatedly scanning said counting zones for a capture image of said falling object;
identifying said capture image; and
including the falling object in a count if the capture image is identified.

9. A method as recited in claim 7 wherein said identifying comprises:

comparing each pixel in said capture image with a threshold value to determine a count of valid pixels; and

obtaining a count of scan lines in said capture image.

10. A method as recited in claim 8 further comprising, comparing said capture image with a known image by comparing said count of valid pixels and said count of scan lines in said capture image with a number of valid pixels and a number of scan lines for a known image.

11. A method as recited in claim 10, wherein said number of valid pixels and said number of scan lines for a know image are obtained during execution in a diagnostic mode.

12. A method as recited in claim 10 further comprising maintaining simultaneous counts for multiple recepticles of said falling objects.

13. A method as recited in claim 9, wherein said count of valid pixels and said count of scan lines are utilized to provide dimensions of said falling object.

14. A method as recited in claim 9, wherein said count of valid pixels and said count of scan lines are utilized to provide fall time information said falling object.

15. A computer readable medium having computer executable instructions for counting a falling object passing between a light source and a plurality of photo detectors, the method comprising:

grouping said plurality of photo detectors into one or more counting zones;
repeatedly scanning said counting zones for a capture image of said falling object;
identifying said capture image; and
including the falling object in a count if the capture image is identified.

16. A computer system having a processor, a memory and an operating environment, the computer system operable to execute instructions for counting a falling object passing between a light source and a plurality of photo detectors, comprising:

grouping said plurality of photo detectors into one or more counting zones;
repeatedly scanning said counting zones for a capture image of said falling object;
identifying said capture image; and
including the falling object in a count if the capture image is identified.

17. A method for analyzing a scanned object image having a plurality of pixels, comprising:

providing a value for each of said plurality of pixels; and

comparing each of said pixel values against a threshold value to produce a grayscale image of the scanned object, wherein said value represents the degree of luminance of said pixel.

18. A computer system having a processor, a memory and an operating environment, the computer system operable to execute instructions for analyzing a scanned object image having a plurality of pixels, comprising:

providing a value for each of said plurality of pixels; and

comparing each of said pixel values against a threshold value to produce a grayscale image of the scanned object,

wherein said value represents the degree of luminance of said pixel.

19. A computer readable medium having computer executable instructions for analyzing a scanned object image having a plurality of pixels, comprising:

providing a value for each of said plurality of pixels; and

comparing each of said pixel values against a threshold value to produce a grayscale image of the scanned object,

wherein said value represents the degree of luminance of said pixel.